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EXAMINER	
BHATIA, AJAY M	

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2145	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/016,223	CHANG ET AL.	
	Examiner	Art Unit	
	Ajay M Bhatia	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-96* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-96* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A network based multi-input to multi-digital output system.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 10 and 42 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. "discovering the one or more output devices includes the information apparatus obtaining from a service node information about the one or more output devices" is not disclosed in the specification and provides no enablement, it is unclear as to what separates a service node from any other node on the network. For the purposes of this office action service node will treaded as any node on the network.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 13, 34, 45, 68 and 79 are rejected under 35 U.S.C. 102(b) as being anticipated by Lo et al. (U.S. Patent 5,519,641 referred to as Lo).

For claim 1, Lo teaches, a data output method for rendering at one or more output devices data content accessed from an information apparatus, comprising:

establishing a communication channel between the information apparatus and the one or more output devices;

receiving at the information apparatus over the communication channel one or more attributes corresponding to the one or more output devices;

selecting at the information apparatus the one or more output devices for rendering the data content based at least in part on the one or more attributes; and

delivering the data content to the one or more selected output devices for rendering. (See Lo, Col. 7 lines 35-20)

For claim 2, Yamamoto fails to teach, the method of claim 1 in which the communication channel includes a wireless communication channel.

For claim 7, Lo teaches, the method of claim 1 further including the information apparatus discovering the one or more output devices to be available to render the data content. (See Lo, Col. 7 lines 21-33)

For claim 13, Lo teaches, the method of claim 7 in which the information apparatus discovers the one or more output devices with wireless communication. (See Lo, Col. 6 lines 18-29)

For claim 33, Lo teaches, a data output method for rendering at a selected output device data content accessed from an information apparatus, comprising:

establishing a communication channel between the information apparatus and the selected output device;

receiving at the information apparatus one or more components associated with the selected output device and enabling the data content to be rendered by the selected output device, the one or more components including an indication of an output data associated with the selected output device;

conforming at the information apparatus the data content to the output data associated with the selected output device; and

delivering the output data to the selected output device for rendering. (See Lo, Col. 7 lines 35-20)

For claim 34, Lo teaches, the method of claim 33 in which the communication channel includes a wireless communication channel. (See Lo, Col. 6 lines 18-29)

For claim 39, Lo teaches, the method of claim 33 further including the information apparatus discovering the selected output device to be available to render the data content. (See Lo, Col. 7 lines 21-33)

For claim 45, Lo teaches, the method of claim 39 in which the information apparatus discovers the selected output device with wireless communication. (See Lo, Col. 6 lines 18-29)

For claim 66, Lo teaches, a data output method for rendering at one or more output devices associated with a selected output system data content accessed from an information apparatus, comprising:

establishing a communication channel between the information apparatus and the selected output system;

receiving at the information apparatus over the communication channel one or more attributes corresponding to the one or more output devices associated with the output system;

selecting at the information apparatus one or more output devices for rendering the data content based at least in part on the one or more attributes; and

delivering the data content to the selected output system for rendering at the selected one or more output devices. (See Lo, Col. 7 lines 35-20)

For claim 68, Lo teaches, the method of claim 66 in which the communication channel includes a wireless communication channel. (See Lo, Col. 6 lines 18-29)

For claim 78, Lo teaches, a data output method for rendering at an output device associated with a selected output system data content accessed from an information apparatus, comprising:

establishing a communication channel between the information apparatus and the selected output system;

receiving at the information apparatus one or more components from the selected output system and enabling the data content to be rendered by the output device associated the selected output system;

conforming at the information apparatus the data content to an output data with the one or more components; and

delivering the output data to the selected output system for rendering by the output device. (See Lo, Col. 7 lines 35-20)

5. For claim 79, Lo teaches, the method of claim 78 in which the communication channel includes a wireless communication channel. (See Lo, Col. 6 lines 18-29)

6. Claims 1, 3-12, 14-33, 35-44, 46-67, 68-78, and 80-96 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamamoto et al. (U.S. Patent 6,553,431 referred to as Yamamoto).

7. For claim 1, Yamamoto teaches, a data output method for rendering at one or more output devices data content accessed from an information apparatus, comprising:

establishing a communication channel between the information apparatus and the one or more output devices; (See Yamamoto, Col. 8 lines 13-27)

receiving at the information apparatus over the communication channel one or more attributes corresponding to the one or more output devices;

selecting at the information apparatus the one or more output devices for rendering the data content based at least in part on the one or more attributes; and (See Yamamoto, Col. 10 lines 12-25)

delivering the data content to the one or more selected output devices for rendering. (See Yamamoto, Col. 10 lines 12-25 and Col. 2 lines 54-60)

8. For claim 3, Yamamoto teaches, the method of claim 1 in which the data content resides in the information apparatus. (See Yamamoto, Col. 10 lines 12-25)

9. For claim 4, Yamamoto teaches, the method of claim 1 further including obtaining the data content from a data source distinct from the information apparatus. (See Yamamoto, Col. 12 lines 35-49)

10. For claim 5, Yamamoto teaches, the method of claim 1 further comprising obtaining authentication information from the information apparatus and authenticating permission for the information apparatus to access the one or more output devices. (See Yamamoto, Col. 27 lines 33-43, Col. 28 lines 34-44, and Col. 28 line 57 to Col. 29 line 18)

11. For claim 6, Yamamoto teaches, the method of claim 1 further including obtaining from the information apparatus payment information to administer payment for the output service that is selected. (See Yamamoto, Col. 24 lines 41-44)

12. For claim 7, Yamamoto teaches, the method of claim 1 further including the information apparatus discovering the one or more output devices to be available to render the data content. (See Yamamoto, Col. 24 line 53 to Col. 25 line 15)

13. For claim 8, Yamamoto teaches, the method of 7 in which discovering the one or more output devices includes the information apparatus broadcasting an output service request and awaiting one or more responses from the one or more output devices. (See Yamamoto, Col. 24 line 53 to Col. 25 line 15)

14. For claim 9, Yamamoto teaches, the method of claim 7 in which discovering the one or more output devices includes the one or more output devices broadcasting information about the output services they provide and awaiting to be contacted by the information apparatus. (See Yamamoto, Col. 24 line 53 to Col. 25 line 15)

15. For claim 10, Yamamoto teaches, the method of claim 7 in which discovering the one or more output devices includes the information apparatus obtaining from a service node information about the one or more output devices. 7. (See Yamamoto, Co. 12 lines 17-35)

16. For claim 11, Yamamoto teaches, the method of claim 7 in which the discovering of one or more output devices involves determining if the one or more output devices satisfy one or more output service requirements. (See Yamamoto, Co. 12 lines 17-35)

17. For claim 12, Yamamoto teaches, the method of claim 11 in which the one or more output service requirements include one or more of price, quality of service, and availability. (See Yamamoto, Co. 12 lines 17-35)

18. For claim 14, Yamamoto teaches, the method of claim 1 in which the attributes associated with the one or more output devices include information characterizing the one or more output devices. (See Yamamoto, Co. 12 lines 17-35)

19. For claim 15, Yamamoto teaches, the method of claim 14 in which the information characterizing the one or more output devices includes one or more of a make identifier, a model identifier, an output device type identifier, an output data format identifier, and an output device identifier. (See Yamamoto, Co. 12 lines 17-35 and Col. 11 lines 12-29)

20. For claim 16, Yamamoto teaches, the method of claim 1 in which the attributes associated with the one or more output devices include information characterizing output services provided by the one or more output devices. (See Yamamoto, Co. 12 lines 17-35 and Col. 11 lines 12-29)

21. For claim 17, Yamamoto teaches, the method of claim 16 in which the information characterizing the output services includes one or more of a quality of service indicator, an availability of service indicator and a service fee indicator. (See Yamamoto, Co. 12 lines 17-35 and figure 7)

22. For claim 18, Yamamoto teaches, the method of claim 1 in which the selecting of the one or more output devices includes input from a user. (See Yamamoto, Col. 10 lines 31-36)

23. For claim 19, Yamamoto teaches, the method of claim 1 in which the selecting of the one or more output devices is based at least in part upon a predetermined default criterion that is stored in the information apparatus. (See Yamamoto, Col. 10 lines 26-31)

24. For claim 20, Yamamoto teaches, the method of claim 1 further including receiving at the information apparatus via the communication channel components enabling the data content to be rendered by the selected one or more output devices. (See Yamamoto, Col. 11 lines 46-48)

25. For claim 21, Yamamoto teaches, the method of claim 20 in which the components include software code. (See Yamamoto, Col. 31 lines 50-65)

26. For claim 22, Yamamoto teaches, the method of claim 20 in which the components include a software application. (See Yamamoto, Col. 10 line 37 to Col. 11 line 5)

27. For claim 23, Yamamoto teaches, the method of claim 20 in which the components correspond to one or more of a device driver, a printer driver, an output driver, and a user interface. (See Yamamoto, Col. 10 line 37 to Col. 11 line 5)

28. For claim 24, Yamamoto teaches, the method of claim 1 in which the information apparatus includes one of a mobile computing device, a pervasive device, a digital camera, and a personal computer. (See Yamamoto, Col. 8 lines 13-27)

29. For claim 25, Yamamoto teaches, the method of claim 1 in which the one or more output devices include one or more of a printing device, a display device, and an audio output device. (See Yamamoto, Col. 14 lines 8-15)

30. For claim 26, Yamamoto teaches, the method of claim 1 further including conforming at the information apparatus the data content to an output data format compatible with the one or more selected output devices before delivering the data content to the one or more selected output devices for rendering. (See Yamamoto, Col. 10 lines 12-31)

31. For claim 27, Yamamoto teaches, the method of claim 26 in which the conforming of the data content employs the one or more attributes. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

32. For claim 28, Yamamoto teaches, the method of claim 26 in which conforming the data content includes at least partial raster image processing of the data content.

(See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

33. For claim 29, Yamamoto teaches, the method of claim 1 further including delivering the data content to an output controller before delivering the data content to the selected output device. (See Yamamoto, Col. 11 lines 50 to Col. 12 line 35)

34. For claim 30, Yamamoto teaches, the method of claim 29 in which the output controller is one of a server, an external controller and a data access point. (See Yamamoto, Col. 10 lines 12-25)

35. For claim 31, Yamamoto teaches, the method of claim 29 further including performing raster image processing on the data content at the one or more selected output devices. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

36. For claim 32, Yamamoto teaches, the method of claim 29 further including converting the data content into an output data compatible with the one or more selected output devices. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

37. For claim 33, Yamamoto teaches, a data output method for rendering at a selected output device data content accessed from an information apparatus, comprising:

establishing a communication channel between the information apparatus and the selected output device;

receiving at the information apparatus one or more components associated with the selected output device and enabling the data content to be rendered by the selected output device, the one or more components including an indication of an output data associated with the selected output device;

conforming at the information apparatus the data content to the output data associated with the selected output device; and .

delivering the output data to the selected output device for rendering. (See Yamamoto, Col. 8 lines 13-27, Col. 10 lines 12-25, Col. 10 lines 12-25, Col. 2 lines 54-60, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

38. For claim 35, Yamamoto teaches, the method of claim 33 in which the data content resides in the information apparatus. (See Yamamoto, Col. 10 lines 12-25)

39. For claim 36, Yamamoto teaches, the method of claim 33 further including obtaining the data content from a data source distinct from the information apparatus. (See Yamamoto, Col. 12 lines 35-49)

40. For claim 37, Yamamoto teaches, the method of claim 33 further comprising obtaining authentication information from the information apparatus and authenticating permission for the information apparatus to access the selected output device. (See Yamamoto, Col. 27 lines 33-43, Col. 28 lines 34-44, and Col. 28 line 57 to Col. 29 line 18)

41. For claim 38, Yamamoto teaches, the method of claim 33 further including obtaining from the information apparatus payment information to administer payment for rendering service provided at the selected output device. (See Yamamoto, Col. 24 lines 41-44)

42. For claim 39, Yamamoto teaches, the method of claim 33 further including the information apparatus discovering the selected output device to be available to render the data content. (See Yamamoto, Col. 24 line 53 to Col. 25 line 15)

43. For claim 40, Yamamoto teaches, the method of claim 39 in which discovering the selected output device includes the information apparatus broadcasting an output service request and awaiting a response from the selected output device. (See Yamamoto, Col. 24 line 53 to Col. 25 line 15)

44. For claim 41, Yamamoto teaches, the method of claim 39 in which discovering the selected output device includes the selected output device broadcasting information about its availability and awaiting to be contacted by the information apparatus. (See Yamamoto, Col. 24 line 53 to Col. 25 line 15)

45. For claim 42, Yamamoto teaches, the method of claim 39 in which discovering the selected output device includes the information apparatus obtaining from a service node information about one or more output devices. (See Yamamoto, Co. 12 lines 17-35)

46. For claim 43, Yamamoto teaches, the method of claim 39 in which the discovering of the selected output device involves determining if the selected output device satisfies one or more output service requirements. (See Yamamoto, Co. 12 lines 17-35)

47. For claim 44, Yamamoto teaches, the method of claim 43 in which the one or more output service requirements include one or more of price, quality of service, and availability. (See Yamamoto, Co. 12 lines 17-35 and figure 7)

48. For claim 46, Yamamoto teaches, the method of claim 33 in which the one or more components are stored in the one or more output devices. (See Yamamoto, Co. 12 lines 17-35)

49. For claim 47, Yamamoto teaches, the method of claim 33 in which the one or more components are stored in one or more output controllers associated with the output devices. (See Yamamoto, Col. 11 lines 50 to Col. 12 line 35)

50. For claim 48, Yamamoto teaches, the method of claim 33 in which the one or more components include at least part of a printer driver. (See Yamamoto, Col. 10 line 37 to Col. 11 line 5)

51. For claim 49, Yamamoto teaches, the method of claim 33 in which the one or more components include software code. (See Yamamoto, Col. 31 lines 50-65)

52. For claim 50, Yamamoto teaches, the method of claim 33 in which the one or more components include one or more device dependent parameters relating to the selected output device. (See Yamamoto, Col. 11 lines 12-29)

53. For claim 51, Yamamoto teaches, the method of claim 33 in which the one or more components relate to one or more of a device driver, a printer driver, an output driver, and a user interface. (See Yamamoto, Col. 10 line 37 to Col. 11 line 5)

54. For claim 52, Yamamoto teaches, the method of claim 33 in which the one or more components include a software application. (See Yamamoto, Col. 10 line 37 to Col. 11 line 5)

55. For claim 53, Yamamoto teaches, the method of claim 33 further including selecting at the information apparatus the selected output device from among plural output devices based on one or more selection criteria. (See Yamamoto, Col. 11 lines 12-29)

56. For claim 54, Yamamoto teaches, the method of claim 53 in which the one or more selection criteria are obtained from a user. (See Yamamoto, Col. 10 lines 31-36)

57. For claim 55, Yamamoto teaches, the method of claim 53 in which the one or more selection criteria are automatically defined based on a predetermined default stored on the information apparatus. (See Yamamoto, Col. 10 lines 31-36)

58. For claim 56, Yamamoto teaches, the method of claim 33 in which conforming the data content includes performing raster image processing on the data content. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

59. For claim 57, Yamamoto teaches, the method of claim 33 further including performing raster image processing on the output data at the selected output device. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

60. For claim 58, Yamamoto teaches, the method of claim 33 further including converting the output data into a form compatible to one of an output engine, a printer engine, an output controller, and a printer controller. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

61. For claim 59, Yamamoto teaches, the method of claim 33 in which the conformed data content is further processed in an output controller associated with the selected output device before being delivered to the selected output device. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35, figure 7 and Col. 10 lines 26-36)

62. For claim 60, Yamamoto teaches, the method of claim 33 in which the information apparatus includes one of a mobile computing device, a pervasive device, a digital camera, and a personal computer. (See Yamamoto, Col. 8 lines 13-27)

63. For claim 61, Yamamoto teaches, the method of claim 33 in which the output device includes one of a printing device, a display device, and an audio output device. (See Yamamoto, Col. 14 lines 8-15)

64. For claim 62, Yamamoto teaches, the method of claim 33 in which the output data includes compressed data. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats and compressed image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

65. For claim 63. In a computer readable medium, data output software for rendering at one or more output devices data content accessed from an information apparatus, comprising:

software for establishing a communication channel between the information apparatus and the one or more output devices;

software for receiving at the information apparatus over the communication channel one or more attributes corresponding to the one or more output devices;

software for selecting at the information apparatus the one or more output devices for rendering the data content based at least in part on the one or more attributes; and

software for delivering the output data to the one or more selected output devices for rendering. . (See Yamamoto, Col. 8 lines 13-27, Col. 10 lines 12-25, Col. 10 lines

12-25, Col. 2 lines 54-60, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

66. For claim 64, Yamamoto teaches, the medium of claim 63 further including software for conforming at the information apparatus the data content in accordance with the one or more attributes before delivering the data content to the one or more selected output devices for rendering. (See Yamamoto, Col. 10 lines 12-25)

67. For claim 65. In a computer readable medium, data output software for rendering at a selected output device data content accessed from an information apparatus, comprising:

software for establishing a communication channel between the information apparatus and the selected output device;

software for receiving at the information apparatus one or more components associated with the selected output device and enabling the data content to be rendered by the selected output device, the one or more components including an indication of an output data associated with the selected output device;

software for conforming at the information apparatus the data content to the output data associated with the selected output device; and

software for delivering the output data to the selected output device for rendering. (See Yamamoto, Col. 8 lines 13-27, Col. 10 lines 12-25, Col. 10 lines 12-25, Col. 2 lines

54-60, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

68. For claim 66, Yamamoto teaches, a data output method for rendering at one or more output devices associated with a selected output system data content accessed from an information apparatus, comprising:

establishing a communication channel between the information apparatus and the selected output system;

receiving at the information apparatus over the communication channel one or more attributes corresponding to the one or more output devices associated with the output system;

selecting at the information apparatus one or more output devices for rendering the data content based at least in part on the one or more attributes; and

delivering the data content to the selected output system for rendering at the selected one or more output devices. (See Yamamoto, Col. 8 lines 13-27, Col. 10 lines 12-25, Col. 10 lines 12-25, Col. 2 lines 54-60, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

69. For claim 67, Yamamoto teaches, the method of claim 66 further including conforming at the information apparatus the data content in accordance with the one or more attributes before delivering the data content to the one or more selected output devices for rendering. (See Yamamoto, Col. 10 lines 12-25)

70. For claim 69, Yamamoto teaches, the method of claim 66 in which the selected output system includes a network. (See Yamamoto, Col. 1 lines 7-12)

71. For claim 70, Yamamoto teaches, the method of claim 66 in which the selected output system includes at least one output device and at least one output controller. (See Yamamoto, Col. 9 line 55 to Col. 10 line 25)

72. For claim 71, Yamamoto teaches, the method of claim 66 in which an output controller in the selected output system communicates with the information apparatus. (See Yamamoto, Col. 9 line 55 to Col. 10 line 25)

73. For claim 72, Yamamoto teaches, the method of claim 71 in which the output controller is associated with one or more output devices. (See Yamamoto, Col. 9 line 55 to Col. 10 line 25)

74. For claim 73, Yamamoto teaches, the method of claim 71 in which the output controller is one of a server, an external controller and a data access point. (See Yamamoto, Col. 9 line 55 to Col. 10 line 25)

75. For claim 74, Yamamoto teaches, the method of claim 71 in which the output controller receives the data content. (See Yamamoto, Col. 9 line 55 to Col. 10 line 25)

76. For claim 75, Yamamoto teaches, the method of claim 74 in which the output controller performs raster image processing on the data content. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35, figure 7 and, Col. 9 line 55 to Col. 10 line 25)

77. For claim 76, Yamamoto teaches, the method of claim 74 further including converting the data content into a form compatible to the selected one or more output devices. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35, figure 7 and, Col. 9 line 55 to Col. 10 line 25)

78. For claim 77, Yamamoto teaches, the method of claim 74 further comprising the output controller delivering the data content to the selected one or more output devices. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35, figure 7 and, Col. 9 line 55 to Col. 10 line 25)

79. For claim 78, Yamamoto teaches, a data output method for rendering at an output device associated with a selected output system data content accessed from an information apparatus, comprising:

establishing a communication channel between the information apparatus and the selected output system;

receiving at the information apparatus one or more components from the selected output system and enabling the data content to be rendered by the output device associated the selected output system;

conforming at the information apparatus the data content to an output data with the one or more components; and

delivering the output data to the selected output system for rendering by the output device. (See Yamamoto, Col. 8 lines 13-27, Col. 10 lines 12-25, Col. 10 lines 12-25, Col. 2 lines 54-60, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35 and figure 7)

80. For claim 80, Yamamoto teaches, the method of claim 78 in which the selected output system includes a network. (See Yamamoto, Col. 1 lines 7-12)

81. For claim 81, Yamamoto teaches, the method of claim 78 in which the selected output system includes at least one output device and at least one output controller. (See Yamamoto, Col. 9 line 55 to Col. 10 line 25)

82. For claim 82, Yamamoto teaches, the method of claim 78 in which an output controller associated with the selected output system communicates with the information apparatus. (See Yamamoto, Col. 9 line 55 to Col. 10 line 25)

83. For claim 83, Yamamoto teaches, the method of claim 82 in which the output controller is one of a server, an external controller and a data access point. (See Yamamoto, Col. 9 line 55 to Col. 10 line 25)

84. For claim 84, Yamamoto teaches, the method of claim 82 in which the output controller receives the output data. (See Yamamoto, Col. 9 line 55 to Col. 10 line 25)

85. For claim 85, Yamamoto teaches, the method of claim 82 in which the output controller performs raster image processing on the output data. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35, figure 7, and Col. 9 line 55 to Col. 10 line 25)

86. For claim 86, Yamamoto teaches, the method of claim 84 further including converting the output data into a form compatible to the output devices. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35, figure 7, and Col. 9 line 55 to Col. 10 line 25)

87. For claim 87, Yamamoto teaches, the method of claim 84 further comprising the output controller delivering the output data to the output devices. (See Yamamoto, Col. 24 lines 13-17, JPEG and GIF are inherently raster type image formats, Col. 11 lines 50 to Col. 12 line 35, figure 7, and Col. 9 line 55 to Col. 10 line 25)

88. For claim 88, Yamamoto teaches, the method of claim 78 in which the one or more components are stored in one or more output controllers associated with the output devices. (See Yamamoto, Col. 11 lines 50 to Col. 12 line 35)

89. For claim 89, Yamamoto teaches, the method of claim 78 in which the one or more components include at least part of a printer driver. (See Yamamoto, Col. 10 line 37 to Col. 11 line 5)

90. For claim 90, Yamamoto teaches, the method of claim 78 in which the one or more components include software code. (See Yamamoto, Col. 31 lines 50-65)

91. For claim 91, Yamamoto teaches, the method of claim 78 in which the one or more components include one or more device dependent information or parameter relating to the selected output device. (See Yamamoto, Col. 9 lines 7-19)

92. For claim 92, Yamamoto teaches, the method of claim 78 in which the one or more components relate to one or more of a device driver, a printer driver, an output driver, and an user interface. (See Yamamoto, Col. 10 line 37 to Col. 11 line 5)

93. For claim 93, Yamamoto teaches, the method of claim 78 in which the one or more components include information characterizing an output service provided by the selected output system. (See Yamamoto, Co. 12 lines 17-35 and Col. 11 lines 12-29)

94. For claim 94, Yamamoto teaches, the method of claim 78 in which the one or more components include a software application. (See Yamamoto, Col. 10 line 37 to Col. 11 line 5)

95. For claim 95, Yamamoto teaches, the method of claim 78 in which the information apparatus includes one of a mobile computing device, a pervasive device, a digital camera, and a personal computer. (See Yamamoto, Col. 8 lines 13-27)

96. For claim 96, Yamamoto teaches, the method of claim 78 in which the output device includes one of a printing device, a display device, and an audio output device. (See Yamamoto, Col. 14 lines 8-15)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US-2003/0122934 by Shiohara, Ryuichi
2. US-6,233,611 by Ludtke et al.
3. US-6,546,419 by Humpleman et al.
4. US-6,678,751 by Hayes et al.
5. US-6,826,632 by Wugofski, Theodore David

6. US-6,330,611 by Itoh et al.
7. US-6,366,965 by Binford et al.
8. US-5,220,674 by Morgan et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay M Bhatia whose telephone number is (571)-272-3906. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia M Wallace can be reached on (571)-272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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AB

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